

## REMARKS

Claims 1-31 and 38-78 are currently pending in the application. Claims 10 and 11 are hereby amended, claims 32-37 are hereby canceled without prejudice, and new claims 40-78 are added for Examiner's consideration. The foregoing separate sheets marked as "Listing of Claims" show all the claims in the application, with an indication of the current status of each.

The cancellation of claims from this application is without prejudice or disclaimer, and Applicant reserves the right to pursue the subject matter of canceled claims in one or more continuation applications.

### **Claim Rejections: 35 USC § 102(b): Examiner's Point #2**

Claims 1, 5-7 and 9 stand rejected under 35 USC § 102(b) as anticipated by Hayashi (JP 2004047873 A). This rejection is traversed.

The present application is a US national stage application of International patent application PCT/JP04/17697, filed November 29, 2004 (see front page of the present application, copy enclosed). The filing date of an international application designating the United States of America is treated as the filing date in the United States of America under PCT Article 11(3), except as provided in 35 U.S.C. 102(e) (see 35 USC §363 and 37 CFR 1.53, noting that 35 U.S.C. 102(e) relates only to US applications and patents). 35 USC §102(b) states that an application may not obtain a patent if: "the invention was patented or described in a printed publication in this or a foreign country...*more than one year prior* to the date of the application for patent in the United States." Thus, to be a valid 102(b) reference against the present application, a printed publication must be dated more than one year prior to November 29, 2004, i.e. a valid reference must be dated prior to November 29, 2003.

Hayashi is a Japanese application that was published in Japan on February 12, 2004, i.e. not prior to November 29, 2003. Thus, Hayashi is not a valid 102(b) reference against the claims of the present application.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of this rejection.

### **Claim Rejections: 35 USC § 102(b): Examiner's Point #3**

Claims 11-17, 19-21 and 36 stand rejected under 35 USC § 102(b) as anticipated by Hayashi (JP 2004047873 A). This rejection is traversed.

Claim 36 is hereby canceled, thereby making moot this portion of the rejection.

As demonstrated above, Hayashi is not a valid 102(b) reference against the claims of the present application.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Claim Rejections: 35 USC § 102(b): Examiner's Point #4**

Claims 2-4, 8, 18, 22, 30 and 31 stand rejected under 35 USC § 102(b) as anticipated by Hayashi (JP 2004047873 A). This rejection is traversed.

As demonstrated above, Hayashi is not a valid 102(b) reference against the claims of the present application.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Claim Rejections: 35 USC § 102(b): Examiner's Point #5**

Claims 1, 5, 6 and 36 stand rejected under 35 USC § 102(b) as anticipated by Kashiwagi (US 2004/0212114 A1). This rejection is traversed.

Claim 36 is hereby canceled, thereby making moot this portion of the rejection.

As demonstrated above, to be a valid 102(b) reference against the present application, a printed publication must be dated more than one year prior to November 29, 2004, i.e. a valid reference must be dated prior to November 29, 2003. Kashiwagi is a US patent application and was published on November 29, 2004, and thus does not meet the criteria for a valid 102(b) reference against the claims of the present application.

For Examiner's information, Applicant also notes that Kashiwagi also does not constitute a proper 102(e) reference. The present application was filed as a US national stage application based on International patent application PCT/JP04/17697, filed November 29, 2004, which in turn was based on Japanese patent application JP2003/400683, the priority date of which is November 28, 2003 (see front page of the present application, copy enclosed). This establishes the date of invention of the subject matter of the claims of the present application as (at least) November 28, 2003. The original Kashiwagi application was filed in the US in Japanese, and *was published for the first time in English* on November 29, 2004 (see the printout from the

public PAIR database concerning US 2004/0212114 A1 attached hereto). Thus, Kashiwagi is not a valid 102(c) reference against the claims of present application.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Claim Rejections: 35 USC § 102(b): Examiner's Point #6**

Claims 11, 16, 19, and 21 stand rejected under 35 USC § 102(b) as anticipated by Kashiwagi (US 2004/0212114 A1). This rejection is traversed.

As demonstrated above, Kashiwagi is not a valid 102(b) reference against the present application.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Claim Rejections: 35 USC § 103(a): Examiner's Point #8**

Claim 7 stands rejected as obvious over a combination of Kashiwagi (as above) in view of Miyoshi (US2004/0253777). This rejection is traversed.

As demonstrated above, the Kashiwagi reference does not predate the priority date of the present application. Thus, Kashiwagi is not a valid reference against the subject matter of the claims of the present application.

As has been established in the previous responses filed March 23, 2009 (see discussion re 102(e) rejection) and October 14, 2009 (see discussion of Examiner's point #9), that Miyoshi's teaching does not anticipate the present invention, as evidenced by the withdrawal of Miyoshi as a 102(e) anticipatory reference in the Office Action of June 23, 2009. In the response of October 14, 2009, it was clearly established that Miyoshi teaches only producing an insulator film by introducing material gas directly into the chamber without any diluent gas as is required in claim 7, by virtue of its dependence on claim 1 via intervening claim 5. In the present Office Action, Examiner has cited Miyoshi only as teaching tetravinyltetremethylcyclotetrasiloxan monomers. This teaching alone does not anticipate or render obvious the subject matter of claim 7, which requires not only the use of tetravinyltetremethylcyclotetrasiloxan monomers but also the other features set forth in claims 1 and 5. However, Kashiwagi cannot be used to cure or mitigate these defects because, as established above, Kashiwagi is not a valid reference against the present application.

In view of the foregoing, Applicant respectfully requests clarification, reconsideration and withdrawal of this rejection.

**Claim Rejections: 35 USC § 103(a): Examiner's Point #9**

Claim 10 stands rejected as obvious over a combination of Hayashi (as above) in view of Gates (US2005/0276930). This rejection is traversed.

As demonstrated above, the Hayashi reference does not predate the priority date of the present application. Thus, Hayashi is not a valid reference against the subject matter of the claims of the present application.

As established in the response filed on October 14, 2009, Gates does not teach silicon and oxygen skeletons that have at least one unsaturated hydrocarbon group bound with a side chains of a skeleton, as required in the present claim 10. Further, Gates does not teach a plasma mixture of rare gas and oxidizer gas or hydrogenated silicon gas as required in claim 10. Thus, Gates alone does not anticipate nor render obvious the subject matter of claim 10, and Hayashi is not available as a reference to cure or mitigate these defects.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Claim Rejections: 35 USC § 103(a): Examiner's Point #10**

Claims 32-35 and 37 stand rejected as obvious over a combination of Kashiwagi (as above) in view of Wu (US 7,241,704). This rejection is traversed.

Claim 37 is hereby canceled, thereby making moot this portion of the rejection.

As demonstrated above, the Kashiwagi reference does not predate the priority date of the present application. Thus, Kashiwagi is not a valid reference against the subject matter of the claims of the present application.

As established above, the priority date of the present application is November 28, 2003. The filing date of the Wu reference is August 27, 2004. Thus, Wu also does not predate the present application and thus is not a valid reference against the subject matter of claims 32-35.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Claim Rejections: 35 USC § 103(a): Examiner's Point #11**

Claims 20 stands rejected as obvious over a combination of Kashiwagi (as above) in view of Miyoshi (as above). This rejection is traversed.

As demonstrated above, the Kashiwagi reference does not predate the priority date of the present application. Thus, Kashiwagi is not a valid reference against the subject matter of the claims of the present application.

As established above, Miyoshi alone neither anticipates nor renders obvious the subject matter of the claims of the present application, teaching only tetravinyltetramethdylcyclotetrasiloxane monomers.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Claim Rejections: 35 USC § 103(a): Examiner's Point #12**

Claims 32-35 and 37 stand rejected as obvious over a combination of Hayashi (as above) in view of Wu (as above). This rejection is traversed.

Claims 32-35 and 37 are hereby canceled, thereby making moot this rejection.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Claim Rejections: 35 USC § 103(a): Examiner's Point #13**

Claim 38 stands rejected as obvious over a combination of Hayashi (as above) in view of Wu (as above). This rejection is traversed.

As demonstrated above, neither the Hayashi reference nor the Wu reference predates the priority date of the present application. Thus, neither Hayashi nor Wu nor any combination thereof anticipates or renders obvious the subject matter of claims 32-35 of the present application.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Claim Rejections: 35 USC § 103(a): Examiner's Point #14**

Claims 23-29 stand rejected as obvious over Hayashi (as above). This rejection is traversed.

As demonstrated above, the Hayashi does not predate the priority date of the present application. Thus, Hayashi does not anticipate or render obvious the subject matter of claims 23-29 of the present application.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Claim Rejections: 35 USC § 103(a): Examiner's Point #15**

Claim 39 stands rejected as obvious over a combination of Hayashi (as above) in view of Wu (as above). This rejection is traversed.

As demonstrated above, neither the Hayashi reference nor the Wu reference predates the priority date of the present application. Thus, neither Hayashi nor Wu nor any combination thereof anticipates or renders obvious the subject matter of claim 39 of the present application.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**New claims**

New claims 40-78 are hereby added for Examiner's consideration. Support for these new claims is found in the application as filed, with reference to the paragraph numbers as they appear in the application as published, as follows:

Claims 41: depends from claim 2, which recites all the features;

Claims 42 and 75: paragraphs [0025], [0040] and [0080];

Claims 43 and 76: paragraph [0236];

Claims 44 and 77: paragraph [0237];

Claims 45 and 78: Figure 34, where porous insulating film 75a is between wires 77 and 80 (see paragraph [0222];

Claim 46: see claim 1 and paragraph [0053];

Claim 47: paragraphs [0078] and [0088];

Claim 48: paragraphs [0114], [0143] and [0099];

Claim 49: paragraphs [0085] and [0096];

Claim 50: paragraph [0143] and Figure 14;

Claim 51: Table 4 in [0187] (C/Si of a column of 3V3IPC3S raw material, 5.0 compared to C/Si of a column of N<sub>2</sub>O=0, 0, 2.89);

Claim 52: Table 4 in [0187] (O/Si of a column of 3V3IPC3S raw material, 1.0 compared to O/Si of a column of  $N_2O=0$ , 0, 1.12);

Claim 53: Table 4 in [0187] (H/Si of a column of 3V3IPC3S raw material, 10.0 compared to H/Si of a column of  $N_2O=0$ , 6.10);

Claim 54: paragraphs [0037] and [0048];

Claim 55: these ratios were used in an experiment described in paragraph [0180];

Claim 56: paragraph [0180];

Claim 57: paragraph [0192];

Claim 58: paragraph [0192];

Claims 59, 60 and 61: paragraphs [0179] and [0053];

Claim 62: paragraph [0065];

Claim 63: paragraph [0033];

Claim 64: is a porous insulating film produce by the method of claim 46 and has similar support;

Claim 65: is a porous insulating film produce by the method of claim 62 and has similar support;

Claim 66: see original claim 12;

Claim 67: is a porous insulating film produce by the method of claim 63 and has similar support;

Claim 68: Table 4 in [0187] (C/Si of a column of  $N_2O=0$ , 2.89 compared to C/Si of a column of  $N_2O=1.35$ , 3.33);

Claim 69: Table 4 in [0187] (O/Si of a column of  $N_2O=0$ , 1.12 compared to O/Si of a column of  $N_2O=1.35$ , 1.21);

Claim 70: Table 4 in [0187] (H/Si of a column of  $N_2O=0$ , 6.10 compared to H/Si of a column of  $N_2O=1.35$ , 7.74);

Claim 71: paragraph [0144], which refers to specific inductance capacity data depicted in Figure 14;

Claim 72: paragraphs [0134] and [0140]; and see Figures 11 and 21, which depict data re pore diameter;

Claim 73: original claim 15, paragraph [0038]; and

Claim 74: paragraphs [0039] and [0053].

#### **Other matters**

Claim 10 is hereby amended to recite the method of claim 1, rather than the semiconductor device, since claim 10 depends from claim 1, which is a method claim. Applicant submits that this amendment is formal in nature and introduces no new matter, and respectfully requests entry of this amendment.


#### **Concluding Remarks**

In view of the foregoing, it is requested that the application be reconsidered, that claims 1-31 and 38-78 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at 703-787-9400 (fax: 703-787-7557; email: ruth@wcc-ip.com) to discuss any other changes deemed necessary in a telephonic or personal interview.

If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,



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